

Claim Amendments

Claims 1-27 (canceled).

28. (Currently amended) A computer-implemented method of operation for a wireless local area network (WLAN) that includes a chain of repeaters topology, the method comprising:

(a) ~~tuning~~ detecting a conflict on a channel of a frequency band ~~by a first repeater to determine whether the channel is available for use~~ in a branch of the repeater topology; and

(b) ~~testing the channel for reliability by sending data that includes real-time audiovisual content from the first repeater to a next repeater in the chain at a throughput of at least 11Mbps~~ adapting the WLAN to the conflict by re-configuring a first repeater in the branch to re-use a certain channel already in use by a neighboring repeater in the repeater topology, the first repeater and the next neighboring repeater being physically obstructed from a line-of-sight view, and ~~receiving data back from the next repeater by the first repeater, the first repeater being re-configured to transmitting data at a data throughput of at least 11Mbps on the certain channel~~ during even time intervals and receiving receive data at the data throughput on the certain channel during odd time intervals, the next neighboring repeater transmitting during the odd time intervals and receiving during the even time intervals; and

(c) ~~allocating the channel for use as a transmission link between the first and next repeaters.~~

29. (Currently amended) The computer-implemented method of claim 28 wherein a next successive repeater in the repeater topology receives data on the

certain channel from the first repeater and re-transmits the data on a different channel further comprising repeating (a)-(e) for each repeater in the chain.

Claim 30 (canceled).

31. (Currently amended) The computer-implemented method of claim 28 further comprising monitoring signal quality of the certain channel during data transmissions.

32. (Currently amended) The computer-implemented method of claim 31 28 wherein the conflict arises from operation of a wireless device not connected to the WLAN further comprising switching to a different channel if the signal quality falls below a certain level.

33. (Currently amended) The computer-implemented method of claim 28 wherein (a)-(e) the detecting and adapting steps are performed by at least one processor of the WLAN.

34. (Currently amended) The computer-implemented method of claim 28 wherein (a)-(e) the detecting and adapting steps are performed by at least one processor of an access point that functions as a data source.

35. (Previously presented) The computer-implemented method of claim 28 wherein the frequency band comprises a 5GHz frequency band.

36. (Previously presented) The computer-implemented method of claim 28 wherein the frequency band comprises a 2.4GHz frequency band.

37. (Withdrawn) A computer-implemented method of operation for a wireless local area network (WLAN) that includes a source access point and a chain of repeaters, the method comprising:

transmitting, by the source access point and each of the repeaters, at a first power level sufficient to establish communications with all of the repeaters in the chain;

reducing transmission power output, by at least one of the repeaters, to a second power level.

38. (Withdrawn) The computer-implemented method of claim 37 wherein the first power level comprises a maximum power level.

39. (Withdrawn) The computer-implemented method of claim 37 wherein the second power level comprises a minimum level needed to maintain communications.

40. (Withdrawn) The computer-implemented method of claim 37 further comprising reducing transmission power output by the source access point.

41. (Withdrawn) A computer-implemented method of operation for a wireless local area network (WLAN) that includes a source access point and a chain of repeaters to provide a wireless connection between a source access point and a destination device, the method comprising:

transmitting, by each of the repeaters, at a first power level sufficient to establish communications with all of the repeaters in the chain;

reducing transmission power, by at least one of the repeaters, to a minimum level needed to maintain communications with all of the repeaters.

42. (Withdrawn) The computer-implemented method of claim 41 wherein the reducing of transmission power is responsive to a command from a processor associated with the source access point.

43. (Withdrawn) The computer-implemented method of claim 41 wherein the reducing of transmission power is responsive to a command from a processor associated with the at least one of the repeaters.

44. (Withdrawn) A computer-implemented method of operation for a wireless local area network (WLAN) that includes a source access point and a chain of repeaters, the method comprising:

transmitting, by each of the repeaters, at a first power level to establish communication links between the repeaters in the chain;

reducing transmission power, by each of the repeaters, to a minimum level needed to maintain the communication links.

45. (Withdrawn) The computer-implemented method of claim 44 wherein the reducing of transmission power is responsive to a command from a processor associated with the source access point.

46. (Withdrawn) The computer-implemented method of claim 44 wherein the first power level comprises a maximum power level.

47. (New) A computer-readable memory encoded with a computer program for configuring a wireless network that includes a repeater topology, when executed, the computer program being operable to:

detect a conflict on a channel of a frequency band in a branch of the repeater topology operating at a data throughput of at least 11Mbps; and

adapt the wireless network to the conflict by re-configuring a first repeater in the branch to re-use a certain channel already in use by a neighboring repeater in the repeater topology, the first repeater and the neighboring repeater being physically obstructed from a line-of-sight view, the first repeater being re-configured to transmit data at the data throughput on the certain channel during even time intervals and receive data at the data throughput on the certain channel during odd time intervals, the neighboring repeater transmitting during the odd time intervals and receiving during the even time intervals.

48. (New) The computer-readable memory of claim 47 wherein a next successive repeater in the repeater topology receives data on the certain channel from the first repeater and re-transmits the data on a different channel.

49. (New) The computer- readable memory of claim 47 wherein the conflict arises from operation of a wireless device not connected to the wireless network.

50. (New) The computer-implemented method of claim 47 wherein the frequency band comprises a 5GHz frequency band.

51. (New) The computer-implemented method of claim 47 wherein the frequency band comprises a 2.4GHz frequency band.